

ABSTRACT OF DISCLOSURE

In an adhesive sheet exfoliation process in a pick-up operation for a thin-type chip 6 adhered to the adhesive sheet 5, a suction exfoliation tool 22 provided at its adhesion surface 22a with plural suction grooves 22b is abutted against the lower surface of the adhesive sheet 5. Then, air within the suction grooves 22b are vacuum-sucked to bend and deform the adhesive sheet 5 together with the chip 6 thereby to exfoliate the adhesive sheet 5 from the lower surface of the chip 6 due to such bending deformation. Thus, it is possible to realize the picking-up operation with high productivity without causing a problem such as breakage or crack.